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ABSTRACT OF THE DISCLOSURE

An integrated dual source recycling system and method for a chemical oxygen-iodine laser system is described. The recycling system primarily includes: (1) a first collection system for collecting an amount of spent basic hydrogen peroxide comprised of spent aqueous potassium chloride; and (2) a second collection system for collecting an amount of the spent laser exhaust gas. Several processing systems are also employed to convert the spent aqueous potassium chloride and the spent laser exhaust gas into hydrogen peroxide and potassium hydroxide which are mixed together to form fresh basic hydrogen peroxide. Additionally, the spent laser exhaust gas is recycled back into molecular nitrogen, molecular iodine, molecular oxygen, and molecular chlorine.